

# ORIAG Meeting: DECS Subcommittee Minutes

September 26, 2008

## Member Attendees

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## **VDECS Viability and the Timing of Double Credit**

**Camarillo Engineering (CEI)** presented information on their research into VDECS suitable for their fleets. Mr. Dave Porcher of CEI stated that after exhaustive research, CEI does not believe that there are sufficient devices to meet the needs of the regulation. Mr. Porcher said that even for fleets willing to pay, research, and take all possible approaches, the supply of devices simply will not support compliance with the regulation. He also said that the technology and installation expertise has simply not developed as expected by ARB staff and the board when considering the regulation.

### **Additional Members:**

- DECS subcommittee members expressed concern regarding the limited availability of VDECS. They raised the point that there are currently very few choices, especially for applications where plugging in to regenerate is not practical, and that when the regulation was adopted, staff said many more options would become available, and this has not happened.
- ORIAG members would like staff to convince the board to extend the double credit period until more VDECS choices are available. The members believe that the timeline of the regulation was based on having more choices available for VDECS. The groups believes that if more passive units become available then the requirements of the regulation will likely be met, and people will buy these units to get the PM reductions.

**ARB:** Staff recognizes we expected and hoped that more devices would become available; however extending the double credit deadline would require a change to the regulation, which would require action by the board. It is one of the things we can consider for the staff report.

**VDECS Manufacturer:** "The certification and verification of VDECS is extremely expensive and time intensive. The process, after the development phases, can take up to year. Additionally, many VDECS fail after all the work put into the process. Many manufacturers also take conditional verification at 300 hrs, before we get to 1000 hours testing, but if the device fails, then the money must be refunded for the devices sold. Due to the complexity of the process, the devices that fleets are hoping will be available in the double credit period will not be available. The issue is simply a calendar problem, not a willingness to pursue verification."

**VDECS Manufacturer:** "We anticipate that fleets will come in a rush to get retrofits near March 1, 2009, and so will miss on double credit because they will order after Nov. 1, 2009, and the devices won't be ready in time to get double. It would benefit manufacturers, in our opinion, to have the double credit PO cut-off date moved from November 1, 2008 to March 1, 2009."

### **Successful and Unsuccessful VDECS to Date:**

- **Chair:** Could we hear from the group about what retrofits and applications have been successful and which ones have not?
  - **Member:** We have one Level 3 VDECS on a 500 horsepower engine with a retrofit that now has 700 hours on it. It has had numerous problems and we have not found a fix. Additionally we have times where we lose many hours due to the issues with the device. It is on a Tier 3 scraper that is very clean, but the regeneration cycles and technical aspects of the retrofit make it unreliable. When the retrofit scraper is sent to a job, we have to send a Tier 0 backup scraper to work while the retrofit machine is being recharged.
  - **Member:** Granite Construction installed several level 3 passive devices as muffler replacements and had no problems.

### **Additional Comments and Feedback**

#### **Datalogging**

- One fleet expressed concerns regarding ARB's requirement of exhaust temperature datalogging before a passive VDECS can be installed, particularly in regards to equipment that is not used year-round; "If you need to datalog the temperature when it (the equipment) is not running, there is not a good solution. Then if you just use the equipment for datalogging purposes, and then the data is not very accurate and there is a cost involved. The manufacturers will not put passive system on this equipment if the verification temperature requirements are not met, so we have to pay more for the active systems. We are frustrated because ARB is preventing manufacturers from putting passive systems, even when the devices could work well. Additionally, ARB comes out and asks to see the temperature profiles for equipment that ha
- One fleet had devices installed and working for five years, and had to pull the devices because the profile does not meet the requirements, even though the device was working.
- The fleets need guidance on what will be allowed when VDECS are taken out of service, for instance if they swap in a VDECS while one is out being cleaned, what happens when they get inspected and have the wrong serial numbers in the device.
- Many fleets do not have the option to use plug in VDECS, so that limits their options. They would also have to consider how many generators would be necessary to regenerate VDECS.
  - **ARB:** We are developing guidance for what it means to say a VDECS cannot be installed due to electricity requirements.
- Fleets wanted to understand the purpose of defining this feasibility, and whether it will change the verification or exemptions from retrofitting.
  - **ARB:** This will not change the verification process, it will be used however to determine which whether a fleet receives an exemption from installing a VDECS on an application.

- Member's request the manager of the verification section address the group and potentially solicit information about how the process could be improved?
  - **ARB:** We will invite the manager of that group to our next ORIAG meeting.
- Members believe ARB should also consider what it means for when you have an open field and you have to heat the VDECS to regenerate it. There are numerous safety concerns.
- There are also issues with things like vandals harming themselves on the infrastructure necessary to regenerate devices (ex. a generator). There is liability involved.